



# OT06 Rec'd PCT/PTO 0 2

PTO/SB/21 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

the Paperwork Reduction	on Act of 1995, no persons	are required to re	spond to a collection of information	on unless it displays a valid OMB control number.			
			Application Number	10/088,945			
TRANSMITTAL			Filing Date	03/21/2002			
	<b>FORM</b>		First Named Inventor	ANDREWS			
(to be used for a	ll correspondence afte	r initial filing)	Group Art Unit	ТВА			
			Examiner Name	ТВА			
Total Number of	of Pages in This Submi	ssion 5	Attorney Docket Number	50449/UST			
		ENCL	OSURES (check	all that apply)			
Fee Transmittal Form  Fee Attached  Amendment / Reply  After Final  Affidavits/declaration(s)  Extension of Time Request  Express Abandonment Request  Information Disclosure Statement  Certified Copy of Priority Document(s)  Response to Missing Parts/ Incomplete Application  Response to Missing Parts under 37 CFR 1.52 or 1.53		Assignment Papers (for an Application)  Drawing(s)  Licensing-related Papers  Petition  Petition to Convert to a Provisional Application  Power of Attorney, Revocation Change of Correspondence Address  Terminal Disclaimer  Request for Refund  CD, Number of CD(s)  Remarks		After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below):  24 Reference documents			
	SIGNATU	RE OF APPLI	CANT, ATTORNEY, OR	AGENT			
Firm or Individual name	Randee S. Schwartz, Attorney for Applicants, Registration No. 45,085						
Signature							
Date	Date 10/3/02						
<del></del>		OFFICIO	ATE OF MAILING				

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 10/3/ 02 Susan D. Holder Typed or printed name Signature 0 **0**2 Date

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

ANDREWS, et al.

Serial. No. 10/088,945

Filed: March 21, 2002

For: GST SEQUENCES FROM SOYBEAN

AND THEIR USE IN THE PRODUCTION OF HERBICIDE

**RESISTANT PLANTS** 

Art Unit: TBA

Examiner: TBA

Atty Docket: 50449/UST

Confirmation No.: 4663

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

This Information Disclosure Statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98. The items listed on the enclosed Form PTO-1449 may be deemed to be pertinent to the above-identified application and are made of record to assist the Patent and Trademark Office in its examination of this application. The Examiner is respectfully requested to fully consider the items in relation to this application and to indicate that each reference was considered by returning a copy of the initialed PTO 1449 forms.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicants reserve the right to dispute any of the listed documents as prior art during examination. Further, Applicants do not waive any right to take any action that would be appropriate to antedate or

In re Applica of Andrews, et al. Serial No. 10/088,945

Applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application. Further, the submission of the Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other material information may exist.

In accordance with 37 CFR §1.97(b)(3), no fee is believed to be required for consideration of this Statement since it is being submitted before the mailing date of a first Office Action on the merits. If a fee is deemed to be required, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 50-1744.

Respectfully submitted,

Randee S. Schwartz Attorney for Applicants Registration No. 45,085

Syngenta Biotechnology, Inc.

P. O. Box 12257

Research Triangle Park, NC 27709-2257

Telephone: 919-765-5098

Date:  $\left| o / 3 \right| \circ 2$ 

Sheet 1 of 2

**FORM PTO-1449** (REV. 7-85)

U.S. DEPARTMENT OF COMMERCE PATENT AND EMARK OFFICE

INFORMATION DISCLOSURE EITATION everal sheets if necessary)

ATTY. DOCKET 50449/UST APPLICATION NO. 10/088,945 **APPLICANT** ANDREWS et al **FILING DATE:** March 21, 2002

Confirmation No. 4663 Group TBA

# **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL			DATE	NAME	CLASS	SUBCLASS	FILING DATE
	Α	US 6,063,570	5/16/00	McGonigle	435	6	

# FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	OFFICE	CLASS	SUBCLASS	TRAN YES	SLATION NO
 В	WO 00 47728	8/17/00	WIPO	9	10		
 С	WO 00 18936	4/6/00	WIPO	15	82		
 D	WO 99 14337	3/25/99	WIPO	15	54		

#### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

_	Andrews et al., Glutathione Transferase Activities toward Herbicides Used Selectively in Soybean
E	Pesticide Science, Vol. 51 (1997), pp. 213-222
F	Andrews et al., Glutathione transferases in soybean  Journal of Experimental Botany, Vol. 49, Supplemental (May 1998), pp. 22-23
F	Journal of Experimental Botany, vol. 49, Supplemental (May 1990), pp. 22-23
G	Blewitt, M., BNLGHi10422 Six-day Cotton fiber Gossypium hirsutum cDNA 5' similar to (AF064201) glutathione S-transferase [Gossypium hirsutum], mRNA sequence
G	Accession No.: AI731664 [database, EMBL online], Retrieved from the internet 6/27/02: <url: cgi-bin="" emblfetch<="" http:="" td="" www.ebi.ac.uk=""></url:>
н	Federspiel et al., Arabidopsis thaliana chromosome I BAC F23H11 genomic sequence, complete sequence
•	Accession No.: AC007258 [database, EMBL online], Retrieved from the internet 6/27/02: <url: cgi-bin="" emblfetch<="" http:="" td="" www.ebi.ac.uk=""></url:>
,	Frendo et al., Localisation of glutathione and homoglutathione in Medicago truncatula is correlated to a differential expression of genes involved in their synthesis
•	The Plant Journal, Vol. 17(2) (1999), pp. 215-219
J	Frendo et al., Medicago truncatula putative glutathione synthetase (GSHS1) mRNA, partial cds. Accession No.: AF075699 [database, EMBL online], Retrieved from the internet 6/27/02: <url:< td=""></url:<>
3	http://www.ebi.ac.uk/cgi-bin/emblfetch
V	Frendo et al., Medicago truncatula putative glutathione synthetase (GSHS2) mRNA, partial cds. Accession No.: AF075700 [database, Genbank online], Retrieved from the internet 6/27/02: <url:< td=""></url:<>
 K	http://www.ncbi.nlm.nih.gov/entrez/
L	Klapheck et al., Properties and localization of the homoglutathione synthetase from phaseolus- coccineus leaves
_	Physiologia Plantarum, Vol. 74, No. 4 (1988), pp. 733-739

EXAMINER	DATE CONSIDERED

FORM PTO-1449

(REV. 7-85)

U.S. DEPARTMENT OF COMMERCE PATENT AND EMARK OFFICE INFORMATION DISCLOSURE ITATION

(Uses exeral sheets if necessary)

ATTY. DOCKET 50449/UST APPLICATION NO. 10/088,945 APPLICANT ANDREWS et al FILING DATE: March 21, 2002

Confirmation No. 4663 Group TBA

#### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

	OTHER DOCOMENTS (including Author, Title, Date, Pertinent pages, Etc.)
М	Kovari, I.A., and Goldsbrough, P.B., Lycopersicon esculentum glutathione synthetase (GSH2) mRNA, complete cds.  Accession No.: AF017984 [database, EMBL online], Retrieved from the internet 6/27/02: <url: cgi-bin="" emblfetch<="" http:="" td="" www.ebi.ac.uk=""></url:>
N	Matamoros et al., Glutathione and Homoglutathione Synthesis in Legume Root Nodules Plant Physiology, Vol. 121 (November 1999), pp. 879-888
0	McGonigle et al., A Genomics Approach to the Comprehensive Analysis of the Glutathione S- Transferase Gene Family in Soybean and Maize Plant Physiology, Vol. 124 (November 2000), pp. 1105-1120
Р	McGonigle et al., Homoglutathione Selectivity by Soybean Glutathione S-Transferases Pesticide Biochemistry and Physiology, Vol. 62 (1998), pp. 15-25
Q	McKersie et al., Superoxide dismutase enhances tolerance of freezing stress in transgenic alfalfa (Medicago sativa L.) Plant Physiology, Vol. 103, No. 4 (December 1993) pp. 1155-1163
R	Riechers et al., Aegilops tauschii glutathione S-transferase TSI-1 mRNA, complete cds. Accession No.: AF004358 [database, EMBL online], Retrieved from the internet 6/27/02: <url: cgi-bin="" emblfetch<="" http:="" td="" www.ebi.ac.uk=""></url:>
s	Schaefer et al., B. juncea mRNA for glutathione synthetase Accession No.: Y10984.1 [database, EMBL online], Retrieved from the internet 6/27/02: <url: cgi-bin="" emblfetch<="" http:="" td="" www.ebi.ac.uk=""></url:>
Т	Shoemaker et al., sa63f01.yl Gm-c1004 Glycine max cDNA clone GENOME SYSTEMS CLONE ID: Gm-C1004-3986 5' similar to TR:004562 004562 T7N9.15;, mRNA sequence Accession No.: Al440996 [database, EMBL online], Retrieved from the internet 6/27/02: <url: cgi-bin="" emblfetch<="" http:="" td="" www.ebi.ac.uk=""></url:>
U	Shoemaker et al., sil4cll.yl Gm-c1029 Glycine max cDNA clone GENOME SYSTEMS CLONE ID: Gm-c1029-1197 5' similar to TR: 004941 004941 Glutathione S-Transferase TSI-1;, mRNA sequence Accession No.: AW471665 [database, Genbank online[, Retrieved from the internet 6/27/02: <url: <="" entrez="" http:="" td="" www.ncbi.nlm.nih.gov=""></url:>
٧	Skipsey et al., "Purification and characterization of glutathione transferase enzymes from soybean seedlings," in <i>British Crop Protection Conference—Weeds</i> (British Crop Protection Council, 1997), pp. 789-794
w	Skipsey et al., Substrate and thiol specificity of a stress-inducible glutathione transferase from soybean Federation of European Biochemical Societies Letters, Vol. 409 (1997) pp. 370-374
x	Skipsey, M., Glycine max mRNA for homoglutathione synthetase (hGS gene) Accession No.: AJ272035 [database, EMBL online], Retrieved from the internet 6/27/02: <url: cgi-bin="" emblfetch<="" http:="" td="" www.ebi.ac.uk=""></url:>
	N O P Q R S T U V

EV	٨		11	M	D
E A	м	. IN		N	к

**DATE CONSIDERED**